

# The Environmental and Social Impact of Commercial Shrimp Farms



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*Andrew Scott*

[Photo Caption: Mangrove swamp in Bangladesh.]

Throughout the Asia-Pacific region, people who have traditionally sustained themselves through fishing are no longer able to do so. Inappropriate fishing technologies and forestry practices, urbanization, over-harvesting, pollution, growing corporate concentration and vertical integration of the global fishing industry are all having a ruinous impact on coastal communities and fish habitat, warned panellists at a recent international workshop on fishing and aquaculture.

The workshop took place during the Sustainability Issues Forum, sponsored by 10 organizations — including the International Development Research Centre (IDRC), the [Canadian International Development Agency](#) (CIDA), and the [International Institute for Sustainable Development](#) (IISD) — as part of the 1997 People's Summit on APEC in Vancouver. (While heads of state from 18 nations met to discuss trade liberalization during the annual Asia-Pacific Economic Co-operation conference, delegates to the People's Summit examined the impact of liberalization on local economies, women, indigenous people, workers' rights, education, the arms trade, and the environment.)

## **Mangrove forests**

Along the coasts of Southeast Asia, India, and Bangladesh — and now in South America and Africa — hundreds of thousands of hectares of lush mangrove forests have been cleared to make room for commercial shrimp farms, a multi-billion dollar global industry. Mangrove forests help control flooding, preserve water quality, and protect shorelines from storms and erosion. They are an essential support system for tropical marine life, providing nurseries and breeding grounds for fish and crustaceans, and vital habitat for other animals. "Without mangroves, many species are becoming endangered or extinct," said [Alfredo Quarto](#), director of the Seattle, Washington-based [Mangrove Action Project](#).

When mangroves are cleared, saltwater pumped into shrimp ponds destroys the soil, salinizing nearby rice paddies, wells, and vegetable plots, added [Meena Raman](#), a lawyer with the Consumers' Association of Penang, Malaysia. Intensive aquaculture can only be sustained for about five years, after which the land is sterile, useless, and susceptible to storm damage. "Rice-

growing areas are converted by aquaculture and ruined," stressed Raman. Shrimp farm operators then move on to other areas.

### **Lost livelihoods**

According to [Khushi Kabir](#), a member of Nijera Kori, a Bangladeshi non-governmental organization (NGO), those who live in the affected areas are left without livelihoods and eventually forced to migrate. Protests are often met with violence. In Bangladesh alone, more than 100 people have been killed in conflicts with commercial shrimp farm owners.

[Steven Shrybman](#), executive director of the West Coast Environmental Law Association, placed some of the blame for the devastation on increased trade liberalization, which encourages governments to relax environmental safeguards in order to attract investment. Raman added that large corporations with a high degree of vertical integration increasingly dominate local resource industries. In shrimp aquaculture, for example, giant companies not only own the farms and process the harvest, but often supply the required feed, chemicals, and antibiotics, and market the produce to consumers in North America and Europe. As a result, little local employment is provided and no local food needs are met.

### **Sustainable policies**

To improve the sustainability of coastal resources, panellists outlined various policy options including: regaining community control of local resources, establishing alternative modes of marketing and selling seafood, and exploring the potential for consumer awareness campaigns on the environmental impact of intensive commercial shrimp farming. They described the efforts of different groups that are seeking to alert the public about this issue. For example, several organizations in India, Ecuador, and Honduras have announced their support for a worldwide boycott of farmed shrimp, while a coalition of Asian NGOs has formed the International Network Against Unsustainable Aquaculture. In North America, the Mangrove Action Project has launched a campaign to educate consumers about the "true costs of a luxury shrimp dinner."

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